

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method for processing query messages over a network, the method comprising:

extracting a plurality of queries and corresponding state information from a plurality of query messages received from a plurality of users over [[the]] a network;

creating a first request message including the plurality of queries and corresponding state information; ~~and a first sequence number associated with the plurality of queries~~;

sending the first request message to a search engine;

receiving a response message from [[the]] a search engine, the response message including a plurality of replies and corresponding state information, each reply generated in response to a query ~~a plurality of replies and the first sequence number, wherein the first sequence number is associated with the plurality of replies, and wherein each reply associated with the first sequence number is generated in response to a query also associated with the first sequence number~~;

creating a plurality of reply messages from the plurality of replies and corresponding state information; and

sending the plurality of reply messages to a [[the]] plurality of users over the network, each reply sent to a user based on the state information.

- 2-3. (Canceled).
4. (Currently Amended) The method of claim 1, further comprising:
determining a message latency associated with the ~~first sequence-~~
~~number~~response message.
5. (Original) The method of claim 4, wherein said determining a message latency includes:
updating a request timestamp based on the request message;
updating a response timestamp based on the response message; and
comparing the request timestamp and the response timestamp.
6. (Currently Amended) The method of claim ~~[[5]]~~1, further comprising:
receiving an additional response message from ~~[[the]]~~ a search engine, the additional
response message including an additional plurality of replies and corresponding
state information, each reply generated in response to a query; and
~~updating the response timestamp based on the additional response message.~~
- 7-10. (Canceled)
11. (Currently Amended) A system for processing query messages over a network,
comprising:

~~at least one processor first-network interface coupled to a first-network;~~
~~a second-network interface coupled to a second-network;~~
~~at least one processor coupled to the first-network interface and the second-~~
~~network interface; and~~

[[a]] memory coupled to [[the]] a processor, the memory including instructions
that when executed on the processor, perform a method comprising:
~~adapted to be executed by the processor to:~~
~~extracting a plurality of queries and corresponding state information from a~~
~~plurality of query messages received from a plurality of users over~~
~~the first-network interface;~~
~~create-creating a first request message including the plurality of queries_~~
~~and corresponding state information and a first sequence number-~~
~~associated with the plurality of queries; and~~
~~sending~~ the first request message to a search engine over the ~~second-~~
~~network interface;~~
~~receive-receiving~~ a response message from [[the]] a search engine, the
response message including a plurality of replies and
corresponding state information, each reply generated in response
to a query, and the first sequence number, wherein the first
sequence number is associated with the plurality of replies, and
~~wherein each reply associated with the first sequence number is-~~
~~generated in response to a query also associated with the first-~~
~~sequence number;~~

~~create~~ creating a plurality of reply messages from the plurality of replies,
and corresponding state information; and
sending the plurality of reply messages to a ~~[[the]]~~ plurality of users over
the first-network-interface, each reply sent to a user based on the
state information.

12-14. (Canceled).

15. (Previously Presented) The system of claim 11, wherein the method comprises-
the instructions are further adapted to:
determining [[e]] a message latency associated with the first-sequence-number response
message, including:
update a request timestamp based on the request message;
update a response timestamp based on the response message; and
compare the request timestamp and the response timestamp;
receive an additional response message from the search engine, the additional-
response message including an additional plurality of replies; and
update the request timestamp based on the additional response message.

16-17. (Canceled)

18. (Currently Amended) A non-transitory ~~computer-readable~~ computer-readable
medium storing instructions ~~adapted to be executed by that,~~ when executed by at

least one processor, [[to]] implement a method for processing query messages over a network, the method comprising:

extracting a plurality of queries and corresponding state information from a plurality of query messages received from a plurality of users over [[the]] a network;

creating a first request message including the plurality of queries and corresponding state information; ~~and a first sequence number associated with the plurality of queries~~;

sending the first request message to a search engine;

receiving a response message from the search engine, the response message including a plurality of replies and corresponding state information, each reply generated in response to a query, ~~and the first sequence number, wherein the first sequence number is associated with the plurality of replies, and wherein each reply associated with the first sequence number is generated in response to a query also associated with the first sequence number~~;

creating a plurality of reply messages from the plurality of replies and corresponding state information; and

sending the plurality of reply messages to a [[the]] plurality of users over the network, each reply sent to a user based on the state information.

19-20. (Canceled).

21. (Currently Amended) The computer readable medium of claim 18, wherein the method further comprises:
determining a message latency associated with the ~~first-sequence-number-~~
response message.
22. (Currently Amended) The ~~computer-readable~~computer-readable medium of claim 21, wherein said determining a message latency includes:
updating a request timestamp based on the request message;
updating a response timestamp based on the response message; and
comparing the request timestamp and the response timestamp.
23. (Currently Amended) The ~~computer-readable~~computer-readable medium of claim [[22]] 18, wherein the method further comprises:
receiving an additional response message from ~~[[the]]~~ a search engine, the
additional response message including an additional plurality of replies;
and
updating ~~the request timestamp based on the additional request message~~.
- 24-27. (Canceled)
28. (Previously presented) The method of claim 1, further comprising:
creating a second request message including a plurality of queries;
sending the second request message to the search engine; and

receiving a response message from the search engine, wherein the response message includes one or more replies generated in response to the first request message and one or more replies generated in response to the second request message, and wherein the second request message is created after the first request message.

29-33. (Canceled)

34. (Previously Presented) The method of claim 1, wherein each query message is a request to resolve a domain name.
35. (Currently Amended) The method of claim 34, wherein extracting the plurality of queries from the plurality of query messages is performed by a front-end protocol engine that sends the request message via a wide area network to [[the]] a search engine.
36. (New) The system of claim 11, wherein each query message is a request to resolve a domain name.
37. (New) The system of claim 36, wherein extracting the plurality of queries from the plurality of query messages is performed by a front-end protocol engine that sends the request message via a wide area network to a search engine.

38. (New) The computer-readable medium of claim 18, wherein each query message is a request to resolve a domain name.
39. (New) The computer-readable medium of claim 38, wherein extracting the plurality of queries from the plurality of query messages is performed by a front-end protocol engine that sends the request message via a wide area network to a search engine.
40. (New) The system of claim 15, wherein said determining a message latency includes:
updating a request timestamp based on the request message;
updating a response timestamp based on the response message; and
comparing the request timestamp and the response timestamp.
41. (New) The system of claim 11, wherein the method comprises:
receiving an additional response message from a search engine, the additional response message including an additional plurality of replies and corresponding state information, each reply generated in response to a query.
42. (New) The method of claim 1, wherein the response message contains at least one reply to a query found in the first request message, and wherein the first

request message is sent to a sent to a search engine from one processor and the response message was received on a different processor.

43. (New) The system of claim 11, wherein the response message contains at least one reply to a query found in the first request message, and wherein the first request message is sent to a sent to a search engine from one processor and the response message was received on a different processor.
44. (New) The computer-readable medium of claim 18, wherein the response message contains at least one reply to a query found in the first request message, and wherein the first request message is sent to a sent to a search engine from one processor and the response message was received on a different processor.
45. (New) The method of claim 1, wherein the response message includes a plurality of replies, wherein the plurality of replies were generated in response to a request message created by a method other than the method receiving the response message.
46. (New) The system of claim 11, wherein the response message includes a plurality of replies, wherein the plurality of replies were generated in response to a request message created by a processor other than the processor receiving the response message.

47. (New) The system of claim 18, wherein the response message includes a plurality of replies, wherein the plurality of replies were generated in response to a request message created by a processor other than the processor receiving the response message.